## (57) Abstract

The invention is especially directed to a system for purifying exhaust gases of diesel or gasoline engines containing on average an excess of oxygen, this system including three operational units being an oxidation catalyst (3), a particle separator (4), and an NO<sub>x</sub> adsorption catalyst (5), this system reducing the amount of hydrocarbons, carbon monoxide, nitrogen oxides and particles present in exhaust gas. The invention is also directed to methods for purifying exhaust gases.